

Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20544

Re: ET Docket No. 10-123, Request for Information on use of 1675-1710 MHz Band

To the Commission:

I am the program coordinator for the International Extension and Public Alert Systems (IEPAS) and RANET programs at the University Corporation for Atmospheric Research (UCAR) Joint Office of Science Support (JOSS). These programs engage in research, development, and implementation activities related to various communications systems used for rural dissemination and public alert and notification. I am concerned that a potential terrestrial interference waiver on the 1675-1710 MHz band for commercial broadband activities will negatively affect current domestic and foreign initiatives relying on the GOES broadcast. While this waiver could potentially affect all direct read out services of the U.S. National Oceanic and Atmospheric Administration (NOAA), I am most concerned with the impact on the Emergency Managers Weather Information Network (EMWIN) and Low-Rate Information Transmission (LRIT) services. Loss of the broadcast or other degradation of the service will affect public warning and safety.

I appreciate very much the importance of increased broadband access for our Nation's industry, education, and technical advancement; however, I would like to draw your attention to the following implications:

- 1) **An effective loss of the EMWIN and LRIT services will not simply affect receive stations, but degrades the public alert and safety infrastructure of entire localities.** EMWIN and LRIT users are represented by municipal and county governments, emergency management entities, as well as first responders, hospitals, and similar. Small businesses utilize the services to protect operations and personnel. These users are therefore both formal and de facto warning authorities and emergency personnel for sizable populations. A loss or degradation of the direct readout services, therefore has impact beyond an accounting of physical stations.
- 2) **International investments in EMWIN and LRIT infrastructure are likely to be lost; as well as the confidence of foreign government colleagues.** While the interference waiver does not directly affect receipt of the broadcast in the Caribbean, Central America, or throughout the Pacific, it is reasonable to assume that in a short time NOAA will not have or be provided with the resources to maintain operational services on GOES that have no effective U.S. user base. This year alone some \$450,000 has been dedicated to a deployment of EMWIN stations throughout the Caribbean and

Central America. Similarly, \$100,000 has been provided to upgrade EMWIN installations throughout the Pacific. The stations in both regions are utilized by foreign national weather services and emergency management entities. In many cases it is the only reliable source of information. Investments in these regions for EMWIN and LRIT has occurred over the past decade or more, with support provided to NOAA from the US Agency for International Development (USAID) and U.S. State Department. Loss or degradation of the EMWIN and LRIT broadcast will affect 20 countries in the Pacific region and 12 countries in the Caribbean with known systems at meteorological services and emergency management entities. It will affect another potential 18 countries throughout the Caribbean and Central America which are expected to receive stations within the next nine months.

3) Commercial terrestrial and satellite based services seem unlikely to provide the same level of function and reliability as the current GOES broadcast of EMWIN and LRIT. The current advantage of EMWIN and LRIT in emergency situations is its use of a satellite broadcast. Simply, these operations can function prior, during, and post event regardless of damage to terrestrial Internet or other services. A terrestrial broadcast and relay system would be prohibitively expensive to deploy, and many of the current users would unlikely be able to afford a service level agreement with a telecommunications provider to guarantee uptime and response. Commercial satellite options are unlikely to provide the same utility. C-Band DVB-S/2 services typically require a large dish solution. EMWIN stations can utilize a small form factor dish, thereby making installation easy, as well as movable / deployable during an event. Ku-Band services, while providing a small form factor dish, are affected by rain fade and other atmospheric attenuation. This of course defeats the purpose of satellite based alert and information service for meteorological events.

I appreciate the challenged faced by the Commission to advance U.S. communications and in particular broadband availability. I do, however, encourage a quantitative inventory of both direct and indirect beneficiaries of the various direct read out services provided by NOAA on GOES, and as possible not taking any action which would negatively affect EMWIN and LRIT services.

Sincerely,



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